



Colorado Reader

AG IN THE CLASSROOM

Colorado Foundation for Agriculture

Who owns the wildlife in our nation?

You do. Every **citizen** of the United States is an owner of the wildlife that live here. All species of wildlife belong to the **public**.

Watching wildlife is an enjoyable experience to most people. It is fun to watch birds, deer, coyotes or rabbits. Sometimes, however, wildlife can become **pests**. For example, birds like woodpeckers can peck holes in the sides of houses and raccoons can invade homes and garages. Sometimes wildlife can carry **diseases** like rabies into an area. Birds can fly in front of airplanes and cause planes to crash. Some animals are

predators. Predators, like coyotes, become pests when they eat a rancher's sheep or kill your dog or cat.



Living with Wildlife



Who is responsible if wildlife does damage?

You are. You, through your representative government, are **responsible** for the **damage** done by wildlife. Several **agencies** work to help solve wildlife problems. These agencies are part of local, state and federal government. An example of a **federal** agency is the United States Department of Agriculture's Wildlife Services program. Each state also has its own wildlife agency.





Wild animals are an important part of our **environment**. For centuries people have used them for food and clothing. Today wildlife still benefit people. Wild animals are part of what we enjoy in outdoor activities such as camping, hiking, biking, photography, fishing and hunting. Some wild animals help control insects and other pests that do damage to our crops and homes.

Managing conflicts between people and wildlife is important and often hard to do. Some questions wildlife managers consider:

What does the wildlife need?

How will the wildlife benefit or harm the environment?

What type of problems will develop between wildlife and humans?

How valuable is the wildlife to an area?

Wildlife is a valuable public resource.

Federal and state governments are responsible for keeping healthy, stable wildlife **populations**. When wildlife cause damage, people from government agencies work to control the damage.

Wildlife damage management responsibilities fall to different agencies depending on the type of animal, type of problem and the location. For example, the U.S. Fish and Wildlife Service is responsible for managing **migratory** birds (like geese, cranes and pelicans) and federally listed **threatened** and **endangered** animals. State wildlife management agencies are responsible for the management of **resident** wildlife and all other animals not federally listed as threatened or endangered. Laws require the U.S. Department of

Agriculture (USDA) to help people solve problems caused by most wildlife. Wildlife Services (WS) is part of the USDA's Animal and Plant Health Inspection Service. These people work with other agencies and individuals to solve conflicts between humans and wildlife.

Name two agencies, one state and one federal, that manage wildlife.

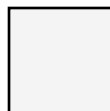


Wildlife living in harmony . . .

Wildlife living in conflict . . .



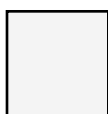
Most of the time wildlife and humans live in **harmony**. For example, predators help reduce rodent populations. But sometimes **conflicts** arise, like when a mountain lion teaches her cubs how to kill by practicing on a herd of sheep. Read the following examples. Place a “C” in front of the examples showing animals and humans in conflict. Put an “H” in front of the examples showing humans and animals living in harmony or when wildlife are helpful to humans.



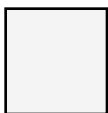
A beaver builds a dam and creates a wetland habitat for birds and other wildlife.



In the spring, a large flock of birds is following the farmer’s tractor eating the seeds the farmer is planting.



In the summer, a large flock of ravens are eating grasshoppers that have invaded the farmer’s alfalfa field.



A coyote eats prairie dogs living in a large cattle pasture.



A coyote eats a rancher’s lambs in the spring.



A beaver builds a dam that floods a road.

Your turn. Pick a wild animal found close to where you live. Write an example of how your animal can live in harmony or be helpful to humans.

Now give an example of how that same animal can sometimes be in conflict with humans.

As we have seen, animals can have conflicts with humans, but sometimes one species of animal can cause problems for another species of animal or cause damage to plants. These are problems Wildlife Services works to solve. Let's travel around the world and see what some of these problems may be and how wildlife specialists work to solve wildlife problems.



Around the World with a Wildlife Specialist

It is a chilly pre-dawn boat ride to a small island off the coast of Massachusetts used by nesting Roseate terns. These birds are endangered because of their limited number. Aggressive gulls attack and kill the tern chicks. The gulls nest in the same area as the terns, driving the terns away. Thus the survival rate of the terns is low. The wildlife specialists are working to limit the number of gull eggs that hatch. This will reduce the gull population, giving the terns a better

chance to survive. One of the methods used is to put corn oil on the gull eggs which keep the gull eggs from hatching.

In Virginia, a wildlife specialist is setting up drift fences to capture Canada geese from a local park. The geese droppings pollute the lake and spoil beaches for human use.

In Georgia and Illinois, specialists have just completed a night-long white-tail deer control project. Deer have overpopulated the area.

The deer are causing many traffic accidents. The deer are often on the airport and travel across the runways. The specialist remove the deer and will donate the meat to area food banks.

Scientists at the National Wildlife Research Center in Ft. Collins, Colorado work to develop ways to solve wildlife problems. They are working on birth control for deer, birds and coyotes. They are researching ways to save endangered species from being killed by other animals. They are developing sprays to keep geese away from parks and golf courses. They work with farmers and ranchers to keep wildlife from eating crops and harming livestock.



In Mississippi, fish farmers are trained by the wildlife specialist on how to keep cormorants from eating the small catfish. These birds eat about \$5 million worth of fish each year. Methods being used to scare birds away include putting up reflecting tape, eyespot balloons, pop-up scarecrows and creating loud noises. The farmers can also cover small ponds and tanks with screens or netting.

In the states of Kentucky, Kansas and Missouri, blackbirds are abundant. In one city, thousands of blackbirds roost every evening near an elementary school. The blackbird droppings are creating a strong odor. These droppings also cause a fungal disease that

can kill people. The specialists are trimming the trees where the birds roost to make the birds move. They will also be setting up a machine that will make the same sound as a blackbird in distress. This makes other birds think there is something dangerous around and they will move to another area.

In Colorado, Utah and Wyoming, specialists are working with ranchers to help combat coyote, black bear and mountain lion attacks during lambing and calving seasons. Methods to help prevent attacks include using electric fencing and propane cannons, hunting and trapping and using **guard animals** like dogs, llamas and donkeys to chase predators away.

Coyotes can also spread rabies. Specialists in Texas are slowing the spread of this disease by **vaccinating** coyotes in a unique way. They drop thousands of treated food (**bait**) from airplanes. The animals eat the bait and become vaccinated against rabies.

In the forests of the west, black bears are killing Douglas fir, redwoods and other trees



because they like the sweet sap of the trees. To prevent this damage, wildlife specialists put out a special sweet feed that the bear will eat rather than destroy the trees.

Across the ocean in Guam, specialists are helping to save island birds and lizards from the brown tree snake. The snake is an exotic animal (not native to the island) and has no natural predators on the island to keep its numbers in balance. Thus the snake has become very abundant. The specialists trap and remove the snakes. They use dogs to search for snakes in cargo leaving the island. They do not want snakes to be carried to Hawaii and other islands.



Reading Charts



When a plane crashes because it runs into a flock of birds, what is the cost of that loss? How do we put a value on human lives? It is very hard to put a value on such a loss.

It is easier for us to put a value on the loss of livestock caused by wildlife. How much was that lamb worth that the coyote killed? How much are the crops worth that were destroyed by deer or a flock of birds?

Study the following chart and answer the questions.

United States Sheep Losses to Predators

<i>Predator</i>	<i>Number of Sheep</i>	<i>Value</i>
Bear	13,675	\$ 695,254
Bobcats	20,850	\$ 868,930
Coyotes	322,125	\$14,533,727
Dogs	47,200	\$ 2,472,831
Eagles	42,300	\$ 1,696,841
Foxes	27,450	\$ 1,091,167
Mountain Lions	35,225	\$ 1,720,656
<u>Other Predators</u>	<u>11,775</u>	<u>\$ 536,600</u>
TOTAL	550,600	\$23,616,006

1. What predator kills the largest number of sheep and lambs?

2. What is the value of sheep killed by coyotes?

Round to the nearest dollar—on average . . .

What is the value of each sheep killed by a bear?

What is the value of each sheep killed by a coyote?

What is the value of each sheep killed by all predators?



CASE STUDY: Bird Problems

It is dawn at the airport. A female duck and her ducklings are marching down the runway. Roberta is called to the runway. She finds the airplanes delaying takeoff to keep from hitting the birds. Her goal is to capture the hen and ducklings. After capture, she moves them from the airport to a park. *Why do the birds present a hazard to airplanes?*

Roberta is a wildlife **biologist** with the U.S. Department of Agriculture's Wildlife Services. Her job is to keep wildlife from becoming a hazard at the airport. Roberta uses many methods to keep animals from feeding, drinking and loafing at the airport. Using many methods is called **Integrated Pest Management (IPM)**. If they aren't on the airport



grounds, then they can't be a problem.

In the two years she has worked with the airport, Roberta has seen 115 species of birds. Most of these are birds flying through the area. The birds that live all-year round at the airport and might cause problems are mallard ducks (like the duck and her ducklings), Canada geese, ring-billed and herring gulls, red-tailed hawks, owls, blackbirds and starlings. Roberta also watches for deer and coyotes.

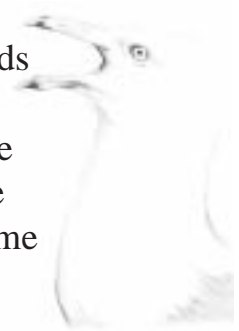
How do you think Roberta keeps the animals away from the airport?

Besides removing animals -- like she did with the hen and ducklings -- some other IPM methods Roberta uses are:

- ✓ chasing animals off of runways
- ✓ lighting fireworks and firing propane cannons to frighten animals away
- ✓ using loudspeakers to send out animal distress calls

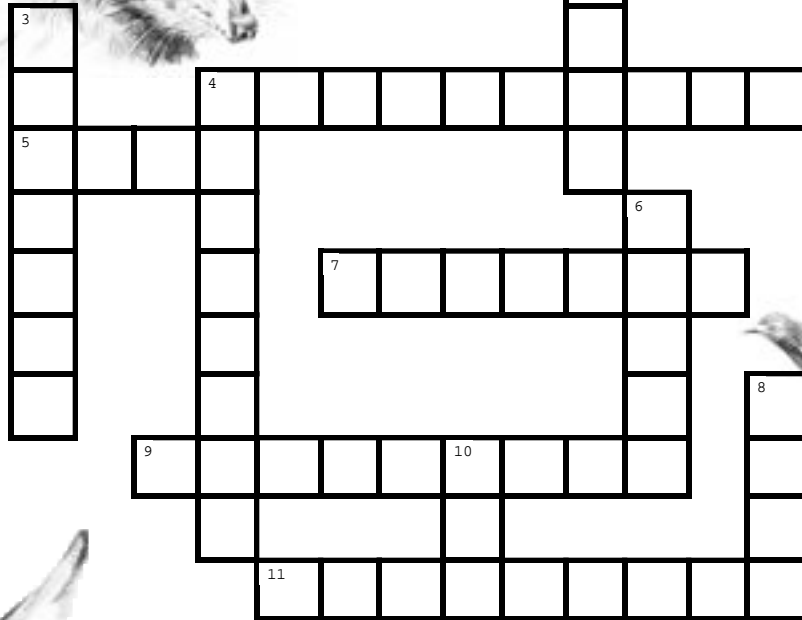
- ✓ placing bright tape on posts to keep birds from landing in areas
- ✓ spraying **repellents**
- ✓ removing trees, grasses, and shrubs where animals live
- ✓ removing sources of water
- ✓ removing trash
- ✓ making suggestions on ways to keep buildings from becoming homes to animals

Often, Roberta must use several of these methods at the same time to make sure wildlife do not become a problem.



As the sun sets on the airport, Roberta stands by her truck and fixes her sharp eyes on an area in the distance. "Flock of blackbirds," she says out-loud. Then as quickly as a bird in flight, she climbs into her truck and drives toward the birds. Her mind is already thinking of ways she can protect the planes from this new threat.

CROSSWORD



ACROSS

2. a person who studies plants and animals is called a _____
4. the number of a species is called this
5. an animal that can do a lot of damage when hit by a car
7. a person who lives in a country is called a _____
9. problems between humans and wildlife are called _____
11. a bird that causes problems with fish farmers

DOWN

1. a dog-like animal that eats rodents, rabbits and sometimes sheep
3. our national government is called this _____
4. an animal that eats another animal is called a _____
6. these animals have a sweet tooth and will tear off the bark of trees to get to the sap
8. when an animal becomes a problem we call it a _____
10. initials for integrated pest management

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